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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/654,619	09/03/2003	Amit Lewin	5957-48401	4999
35690 7590 09/11/2007 MEYERTONS, HOOD, KIVLIN, KOWERT & GOETZEL, P.C. P.O. BOX 398 AUSTIN, TX 78767-0398			EXAMINER NGUYEN, VAN KIM T	
			ART UNIT 2152	PAPER NUMBER
			MAIL DATE 09/11/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

80

Office Action Summary	Application No. 10/654,619	Applicant(s) LEWIN ET AL.	
	Examiner Van Kim T. Nguyen	Art Unit 2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-11 and 30-56 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-11 and 30-56 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>May 25, 2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is responsive to communications filed on May 25, 2007.

Claims 8-11 and 30-56 remain pending in the case.

Information Disclosure Statement

2. The information disclosure statements (IDS) submitted on May 25, 2007 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Response to Arguments

3. Applicant's arguments with respect to claims 8-11 and 30-56 have been considered but are moot in view of the new grounds of rejection.

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 8-11, 30, 34-36, 38-41, 48-51, and 53-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen et al (US 6,477,595), in view of Terry (US 6,178,161).

Regarding claims 8, 38-39, 48-51 and 53-55, Cohen discloses a method of encapsulating frames onto VDSL facility, comprising:

receiving Ethernet frames from an Ethernet source (e.g., two 100Base-T ports 302 to communicate with multimedia switch 260; col. 7: lines 59-63);

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storing the Ethernet frames for subsequent forwarding (e.g., frames from 100Base-T and 10Base-T is stored in packet buffer 204 for subsequent forwarding; col. 8: lines 52-57); and transmitting the plurality of frames over the VDSL facility (col. 6: lines 55-57).

Cohen does not explicitly call for encapsulating the previously stored Ethernet frame within a plurality of frames.

Terry teaches encapsulating Ethernet frames within a plurality of frames, wherein each Ethernet frame is encapsulated entirely within a respective frame of the plurality of frames (col. 1: lines 52-55, and col. 6: lines 40-52).

It would be obvious to one of ordinary skill in the art at the time the invention was made to apply Terry's communication and apparatus method in Cohen's system in order to reduce cross talk and other interferences.

Regarding claim 10, as shown in Figures 1-3, Cohen discloses a method of extracting Ethernet frames from a VDSL facility comprising:

receiving frames from the VDSL facility (e.g., DSL modems 220 are connected to DSL multiplexer 252, thus obviously capable of receiving frames from DSL multiplexer 252; col. 7: lines 56-64. VDSL is part of the DSL family; col. 6: lines 30-60);

storing the frames for subsequent forwarding (e.g., packet buffer 304 is used to store the frames from the DSL multiplexer 252 interface; col. 8: lines 52-54);

and forwarding the frames to an Ethernet source (e.g., forwarding frames to the end stations 210; col. 9: lines 40-43).

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Cohen discloses substantially all the claimed limitations, except a given Ethernet frame is encapsulated entirely within the frame, and extracting Ethernet frames from the received frames.

Terry teaches encapsulating the previously stored Ethernet frames within a plurality of frames, wherein each Ethernet frame is encapsulated entirely within a respective frame of the plurality of frames (col. 1: lines 52-55, and col. 6: lines 40-52), and extracting Ethernet frames from the received frames (col. 8: lines 34-63).

It would be obvious to one of ordinary skill in the art at the time the invention was made to apply Terry's communication and apparatus method in Cohen's system in order to reduce cross talk and other interferences.

Regarding claims 9, 11 and 41, Cohen-Terry also discloses Ethernet source comprises a 10BaseT Ethernet source (Cohen; col. 11: lines 36-39).

Regarding claims 30, 34 and 40, Cohen-Terry also discloses the Ethernet source comprises a 100BaseT Ethernet source (Cohen; col. 11: lines 14-19).

6. Claims 31-32, 35-36, 42-44, 46-47 and 52-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen, in view of Terry, and further in view of Treadaway et al (US 7,002,941).

Regarding claims 31, 35 and 42, Cohen-Terry discloses substantially all the claimed limitation, except the encapsulating comprises inserting a length field prior to the Ethernet frame.

Treadaway also discloses the encapsulating comprises inserting a length field prior to the Ethernet frame (col. 13: lines 39-46).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply Treadaway's method of inserting a length field prior to Ethernet frame in Cohen-Terry's system, in order to provide a traditional low cost and low complexity associated with Ethernet technology while achieving QoS.

Regarding claims 32, 36 and 43, Cohen-Terry-Treadaway also discloses inserting a preamble prior to the length field (Treadaway; col. 13: lines 39-46).

Regarding claim 44, Cohen-Terry-Treadaway also discloses the preamble comprises a plurality of bytes exhibiting high autocorrelation properties (Treadaway; Table 1, col. 14).

Regarding claims 46-47, Cohen-Terry-Treadaway also discloses the first frame excludes an Ethernet preamble that preceded the Ethernet frame on an Ethernet medium (Treadaway; col. 13: lines 39-46).

Regarding claims 52 and 56, Cohen-Terry-Treadaway also discloses encapsulating a plurality of Ethernet frames in respective frames, wherein the plurality of Ethernet frames to be of variable lengths (Treadaway; col. 14: lines 16-39).

7. Claims 33, 37 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen-Terry, in view of Snodgrass et al (US 5,365,551).

Cohen-Terry discloses substantially all the claimed limitations, except the preamble comprises a Barker code.

Snodgrass teaches the preamble comprises a Barker code (col. 10: line 65 – col. 11: line 9).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize Snodgrass's method of using the Barker code in Cohen-Terry's system, motivated by the need of synchronizing the transmitted information.

Conclusion

8. Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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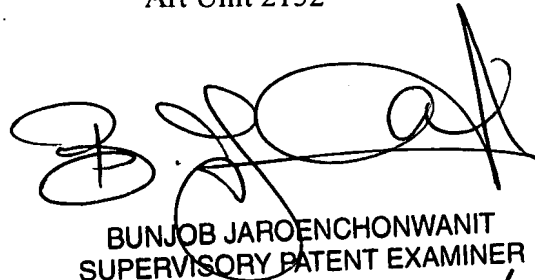
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Van Kim T. Nguyen whose telephone number is 571-272-3073. The examiner can normally be reached on 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Van Kim T. Nguyen
Examiner
Art Unit 2152

vkn


BUNJOB JAROENCHONWANIT
SUPERVISORY PATENT EXAMINER
9/4/17